Overview of Telecommunications and Broadband Loan and Grant Programs

RURAL UTILITIES SERVICE



Seventy Six Year History

• RUS is a rural policy, planning and lending agency which provides loan and grant financing to electric, telecommunications, broadband, water and sewer utilities serving rural Americans.

• Celebrating 76 years since the creation of the Rural Electrification Administration and 75 years since the signing of the Rural Electrification Act.

REA to RUS

RUS is a Rural Development agency within the USDA and the successor agency to the REA. In 1993, the Congress re-organized the USDA and combined the telecommunications and electric programs of the REA with the water and environmental programs of the Farmers Home Administration to create a one-stop utilities shop in the RUS.



RUS 2011 Loan Portfolio = \$61B

Electric (1935)
Telecommunications (1949)
Broadband (2000/2002/2008)
Water and Waste (1937)



Incentive Lender

- RUS is an incentive lender, not a lender of last resort;
- No credit elsewhere test;
- Financial feasibility required;
- Solid history of repayment;
- Low interest rates encourage investment in areas where costs are high.

RUS Telecommunications Infrastructure Loan and Grant Programs in Rural Areas

Telecommunications Infrastructure Loan Program (Titles II and III):

Loans to improve and expand broadband telecommunications

Rural Broadband Loan Program (Title VI): Loans to build and expand broadband networks and services

American Recovery and Reinvestment Act of 2009 (ARRA)

Broadband Initiatives Program (BIP): Loans, grants and loan/grant combinations to build broadband networks

Community Connect: Grants for communities with no broadband

<u>Distance Learning/Telemedicine Loan and Grant Program</u>: Loans and grants for providing Distance Learning and Telemedicine services

Broadband Financing Since the 1990s

- Agency has been lending for broadband capable plant since the early 1990s
- Congress enacted State Modernization
 Planning (English Amendment) in 1993 which continues to guide the agency's lending policies
- Philosophy of build it right the first time
- Technological neutrality

A Pillar of Rural Economic Development

"If we're going to out-innovate and out-educate and out-build global competitors, if we're going to empower folks in rural areas to participate in this national effort to be competitive, they have to have access to 21st century infrastructure, and there's no more important aspect of that 21st century infrastructure than broadband."

USDA Secretary Tom Vilsack
March 10, 2011

RUS Telecommunications Program Three Major Loan Portfolios

- Telecommunications Infrastructure Program (1949) 487 borrowers; \$5.3 billion loans approved (net) since 2001
- Broadband Loan Program (2000, 2002, 2008) 62 borrowers; \$1.1 billion loans approved (net)
- **Broadband Initiatives Program** (ARRA 2009) 242 borrowers/grantees; \$1.2 billion loans approved (net)/\$2.3 billion grants approved (net)

RUS Telecommunications Grants

- Distance Learning and Telemedicine Program (DLT): A Notice of Solicitation of Applications for the DLT Program was announced on Feb. 24, 2011. Applications window closed April 25, 2011.
- Community Connect Grant Program: A Notice of Solicitation of Applications for the Community Connect Grant Program was announced on March 4, 2011. Application window closed May 3, 2011.

RUS Telecom Portfolio Loan Principal Outstanding

as of 12/31/10 (\$M)

Cost-of-Money, Hardship, other: \$2,625

Rural Telephone Bank: \$ 445

Guaranteed – Federal Financing Bank: \$ 690

Total Traditional: \$3,760

Broadband, including ARRA: \$ 507

Total – all of Telecom: \$4,267

Interest Rates & Terms

- Loans are made at or near treasury rates of interest
- FFB Loan guarantees carry treasury rates +1/8%, but allow borrowers to take advantage of low short term rates
- Terms tied to composite life of equipment financed

Average Maturity/Repayment Term

RUS Cost-of-Money, Hardship, FFB

Loans Approved in: FY 2010: 20 years

FY 2009: 19 years

FY 2008: 19 years

Broadband FY 2003-09: 16 years

ARRA Loans all FY 2010: 21 years

RUS Loan Underwriting Analysis

RUS scrutinizes all revenues when examining the financial stability and credit worthiness of any loan applicant.

These revenues include USF, inter-carrier compensation, end user revenues and other sources of income.

RUS Borrowers Must Demonstrate Their Ability to Repay Federal Loans

Applicants must demonstrate that incoming revenues are stable, continuing and sufficient throughout the term of the loan to pay back RUS with interest. The reduction or loss of revenue not otherwise replaced by another source will affect the ability of the agency to make loans and manage the security of its loan portfolio.

RUS Uses a Forward Looking Financial Forecast to Determine Borrower Feasibility

The Agency focuses on the financial projections and feasibility of a loan on a forward looking basis, *i.e.* whether the applicant can repay the loan with revenues in the future.

Without a sufficient forward looking return on investment, RUS will not lend for the construction necessary to provide services.

TIER - Times Interest Earned Ratio

Total Net Income or Margins + Total Fixed Charges Total Fixed Charges

Notes:

- 1) Total Net Income or Margins includes Nonoperating Net Income, Extraordinary Items, Jurisdictional Differences, and Nonregulated Net Income
- 2) Total Fixed Charges includes all interest (including on capital leases) and Allowance for Funds Used During Construction
- 3) RUS calculates TIER after taxes paid rather than before taxes paid

What does TIER tell us?

- TIER is a measure of a borrower's ability to service its debts
- A TIER less than 1.0 indicates that the borrower is not making enough money to cover its debts and may be unable to incur new debt
- With a TIER less than 1.0 a borrower may still have positive cash flow and be able to service its debt

Minimum TIER Requirements

By end of 5th year in loan feasibility study:

- 1.0 For RUS Cost-of-Money or Hardship
- 1.2 For RUS FFB loan guarantee
- 1.5 If CoBank or RTFC is existing co-lender, for RUS to approve an additional loan without the co-lender's prior approval

TIER Maintenance Requirements

Borrower must maintain a TIER, at the end of the 5-year forecast period, at least equal to the projected TIER determined by the feasibility study prepared in connection with the loan, which shall be at least 1.0 and not greater than 1.5.

(For instance, if a borrower's projected TIER is 1.3, they are required to maintain that level thereafter. If the projected TIER is over 1.5, then the required TIER is 1.5.)

TIER & Interest Don't Vary by Risk

Most lenders that have TIER requirements will employ a sliding scale based on perceived risk – a higher TIER (and higher interest rates) for riskier borrowers.

RUS does not vary interest rates based on risk, or set a higher TIER requirement for riskier borrowers.

Relationship Between RUS Borrowers & USF

- 99% (476/480) of Telecommunications
 Infrastructure Borrowers receive interstate high cost USF support
- 10% of Broadband borrowers receive interstate high cost USF support
- 60% of all BIP infrastructure awardees draw from state or interstate USF support mechanisms

RUS Telecommunications Infrastructure Loan Portfolio Analysis

- The most rural of 3 portfolios
- All but 4 borrowers in this program receive USF support
- Area-wide coverage requirements similar to carrier-of-last-resort (COLR) requirements
- Long history & large sample

RUS & USF

- RUS matched USAC USF data with revenue and expenses items listed on the RUS Operating Report.
- Only interstate USF was available for this RUS analysis.
- Over 70% of RUS borrowers receive >25% of operating revenues from USF

Review of Operating Data 2008-2010

- Analyzed the impact on RUS borrowers if USF payments and Net Operating Revenues (NOR) were reduced
- Looked at impact on TIER and Total Long Term Debt (LTD)
- RUS/RD related debt accounted for 89% of total LTD in 2010

Review of Operating Data 2008-2010

Reporting Borrowers:

- **2008** 492 w/ total long term debt (LTD) of \$3.79B
 - 100 had TIER < 1.0 (20%)
 - 114 had TIER < 1.25 (23%)
- **2009** 469 w/ total LTD of \$3.74B
 - 90 had TIER < 1.0 (19%)
 - 115 had TIER < 1.25 (25%)
- **2010** 444 w/ total LTD of \$3.82B
 - 75 had TIER < 1.0 (17%)
 - 97 had TIER < 1.25 (22%)

Impact on RUS Borrowers 2010

- 5% reduction in USF 98 borrowers w/ TIER
 <1.0 or 22% of reporting borrowers. LTD of
 \$793.9M (21% of LTD for all borrowers)
- 5% reduction in NOR 130 borrowers w/TIER
 <1.0 or 29% of reporting borrowers. LTD of
 \$1.06B (28% of LTD for all borrowers)

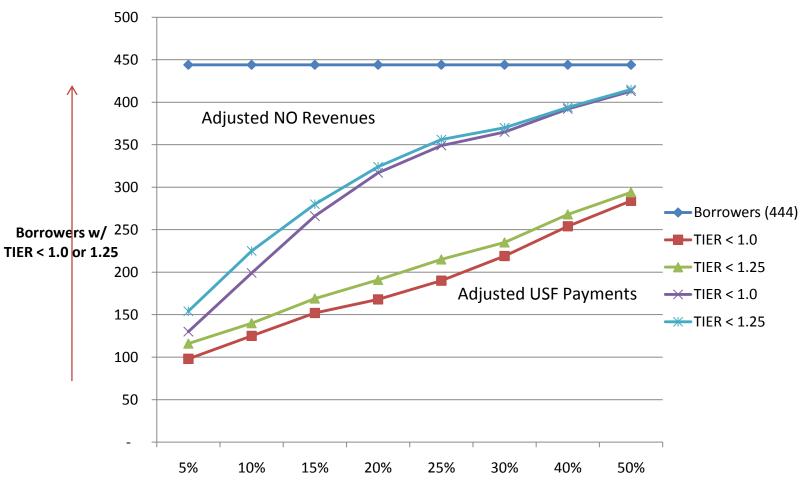
Impact on RUS Borrowers 2010

- 25% reduction in USF 190 borrowers
 w/TIER < 1.0 or 43% of borrowers. LTD of
 \$1.69B (44% of LTD for all borrowers)
- 25% reduction in NOR 349 borrowers
 w/TIER < 1.0 or 79% of borrowers. LTD of
 \$3.21B (84% of LTD for all borrowers)

Impact on RUS Borrowers 2010

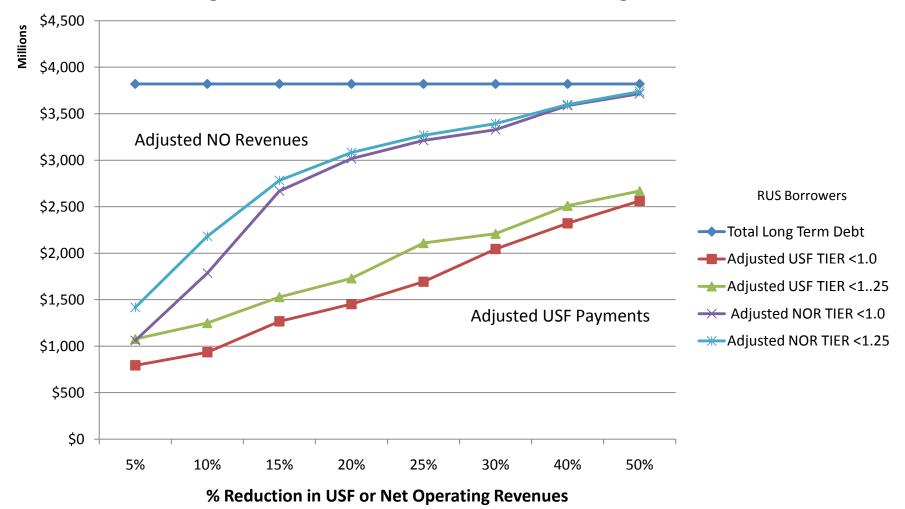
- 50% reduction in USF 284 borrowers
 w/TIER< 1.0 or 64% of borrowers. LTD of
 \$2.6B (67% of LTD for all borrowers)
- 50% reduction in NOR 413 borrowers w/TIER < 1.0 or 93% of borrowers. LTD of \$3.71B (97% of LTD for all borrowers)

Increase in Potential Defaults with Reduction in Revenues - 2010

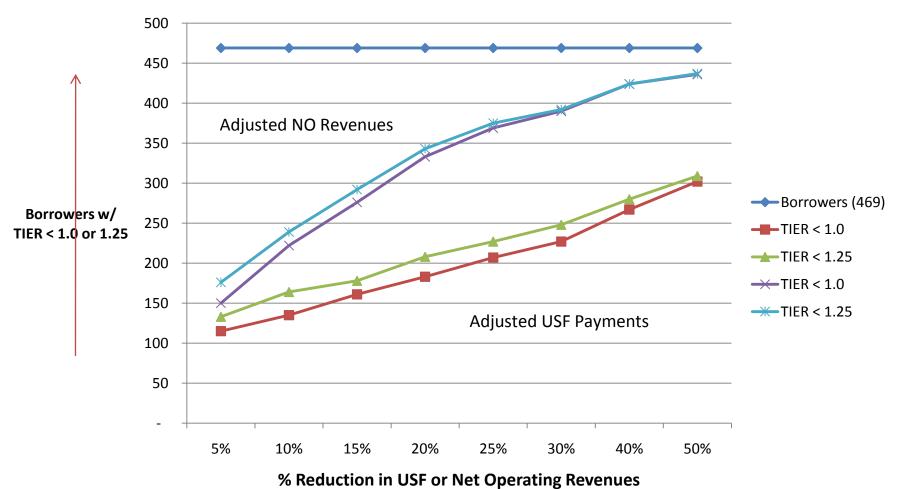


% Reduction in USF or Net Operating Revenues

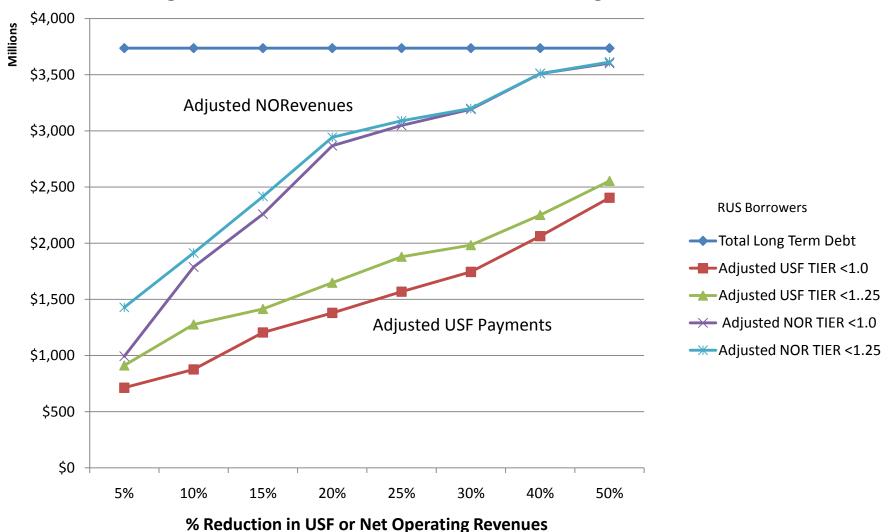
Level of Long Term Debt at Risk Increases w/ Declining Revenues - 2010



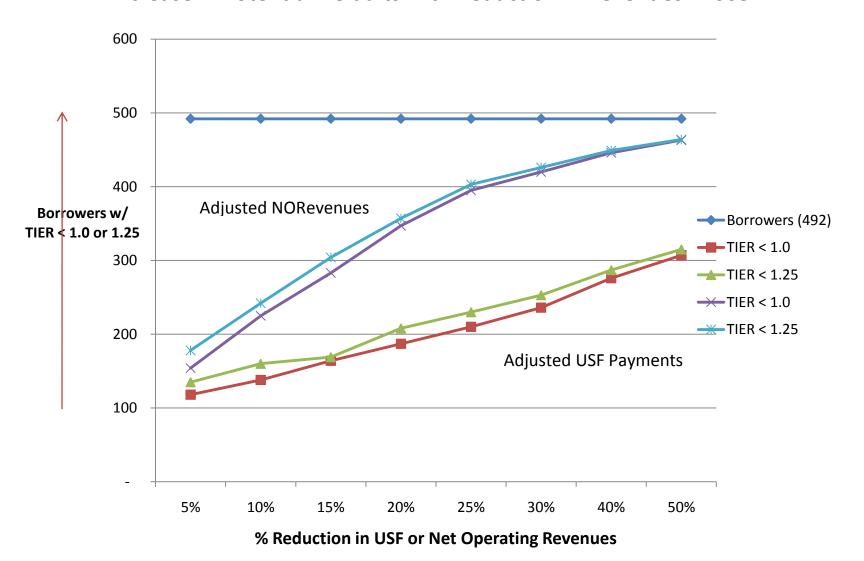
Increase in Potential Defaults with Reduction in Revenues- 2009



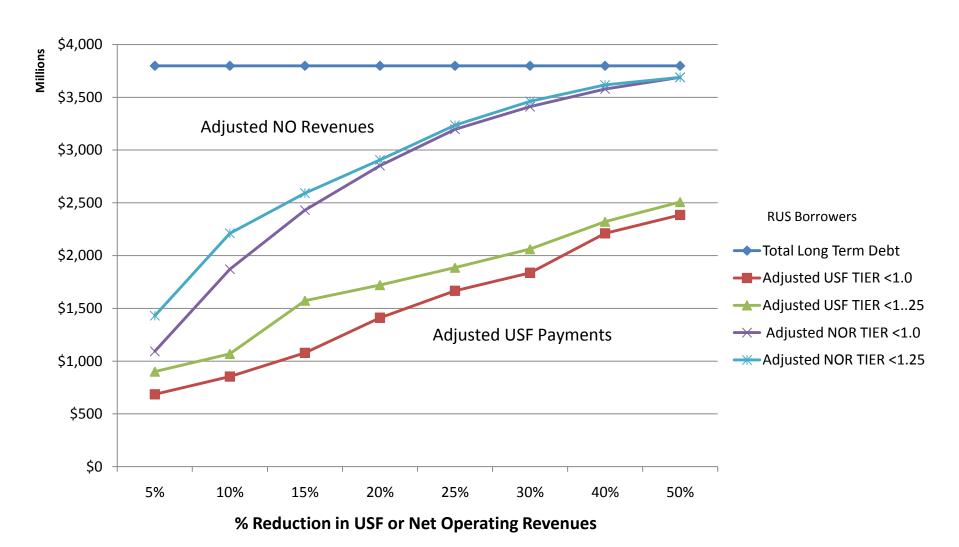
Level of Long Term Debt at Risk Increases with Declining Revenues - 2009



Increase in Potential Defaults with Reduction in Revenues - 2008



Level of Long Term Debt at Risk Increases with Declining Revenues - 2008



Loans Approved - RUS FY 2008 to June 2011

Maximum Amount of RUS Projected USF reduction and still Maintain TIER of 1.25

(marginal FIT rate of 35% was used for analysis of taxable entities)

of Loans % of Total Loans

USF Reduction	FY2010-			FY2010-2011(part		
w/1.25 TIER	2011 (part year)	FY2009	FY2008	year)	FY2009	FY2008
0-10% *	46	38	29	100.00%	100.00%	100.00%
10-15%	34	29	26	73.91%	76.32%	89.66%
15-20%	24	24	24	52.17%	63.16%	82.76%
20-25%	18	21	21	39.13%	55.26%	72.41%
25-30%	15	19	17	32.61%	50.00%	58.62%
30-40%	13	18	13	28.26%	47.37%	44.83%
40-50%	8	12	10	17.39%	31.58%	34.48%
over 50%	4	11	8	8.70%	28.95%	27.59%
Totals	46	38	29	100.00%	100.00%	100.00%

^{*} Since three loans were made with less than 1.25 projected TIER, the 0-10% category includes one loan in 2010 that needs a 1% increase projected USF to meet a 1.25 TIER and two loans in 2009 need a 21% and 4% increase in USF to meet a TIER of 1.25.

Loans still Feasible with TIER 1.25 and 20% Reduction in Projected USF

> FY2010-11 FY2009 FY2008 39.13% 55.26% 72.41%

Note: Significant trend in fewer Borrowers being able remain feasible with less USF than the RUS projected amount

Loans Approved - RUS FY 2008 to June 2011

Maximum Amount of RUS Projected USF reduction and still Maintain TIER of 1.25

(marginal FIT rate of 35% was used for analysis of taxable entities)

Loan Dollars (thousands)

% of Total Loan Dollars (thousands)

USF Reduction	FY2010-			FY2010-2011(part		
w/1.25 TIER	2011(part year) FY20	009	FY2008	year)	FY2009	FY2008
0-10%	\$867,536	\$690,000	\$674,966	100.00%	100.00%	100.00%
10-15%	\$647,620	\$548,788	\$593,723	74.65%	79.53%	87.96%
15-20%	\$502,672	\$483,135	\$541,232	57.94%	70.02%	80.19%
20-25%	\$386,334	\$404,180	\$481,024	44.53%	58.58%	71.27%
25-30%	\$349,118	\$373,571	\$375,585	40.24%	54.14%	55.65%
30-40%	\$240,325	\$342,962	\$289,125	27.70%	49.70%	42.84%
40-50%	\$173,975	\$260,629	\$189,551	20.05%	37.77%	28.08%
over 50%	\$119,517	\$178,295	\$94,510	13.78%	25.84%	14.00%
Totals	\$867,536	\$690,000	\$674,966	100.00%	100.00%	100.00%

^{*} Since three loans were made with less than 1.25 projected TIER, the 0-10% category includes one loan in 2010 that needs a 1% increase projected USF to meet a 1.25 TIER and two loans in 2009 need a 21% and 4% increase in USF to meet a TIER of 1.25. Note: FY2009 - Loan Dollars and % of Total Loan Dollars are interpolated for the 25-30% and 40-50% categories.

Existing and RUS Projected USF (thousands)

Loan S's still Feasible with TIER 1.25

Reduction in	FY 2010-11	FY 2010-11			
RUS USF	Amount of RUS	Preloan			
Projection	USF Projection	Amount USF	and 20% Reduction in	Projected USF	
0% Reduction	\$235,683	\$107,415	FY2010-11	FY2009	FY2008
10%	\$212,115		44.53%	58.58%	71.27%
15%	\$200,331		Note: Significant trend in fewer Borrowe	rs being able	
20%	\$188,546		remain feasible with less USF than t	the RUS project	ed amount
25%	\$176,762				
30%	\$164,978				
40%	\$141,410				
50%	\$117,842				

Loans Approved - RUS FY 2008 to June 2011 Maximum Amount of RUS Projected USF reduction and still Maintain TIER of 1.25

(marginal FIT rate of 35% was used for analysis of taxable entities)

Access Lines

% of Total Access Lines (thousands)

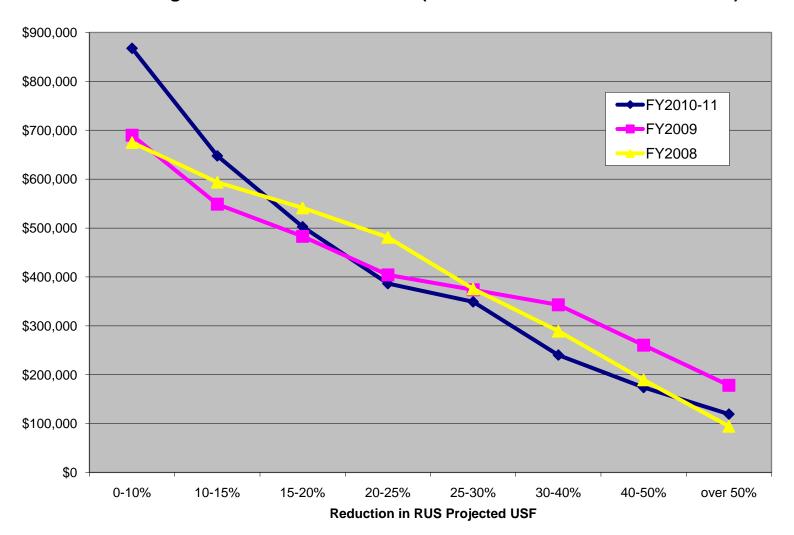
USF Reduction	FY2010-			FY2010-2011(part		
w/1.25 TIER	2011(part year) FY	2009	FY2008	year)	FY2009	FY2008
0-10%	172,234	172,044	177,213	100.00%	100.00%	100.00%
10-15%	132,647	152,298	146,013	77.02%	88.52%	82.39%
15-20%	112,033	137,759	122,246	65.05%	80.07%	68.98%
20-25%	85,259	132,705	99,662	49.50%	77.13%	56.24%
25-30%	67,851 na		84,376	39.39%	na	47.61%
30-40%	43,459	127,474	67,066	25.23%	74.09%	37.84%
40-50%	34,544 na		47,324	20.06%	na	26.70%
over 50%	16,164	53,109	18,455	9.38%	30.87%	10.41%
Totals	172,234	172,044	177,213	100.00%	100.00%	100.00%

^{*} Since three loans were made with less than 1.25 projected TIER, the 0-10% category includes one loan in 2010 that needs a 1% increase projected USF to meet a 1.25 TIER and two loans in 2009 need a 21% and 4% increase in USF to meet a TIER of 1.25.

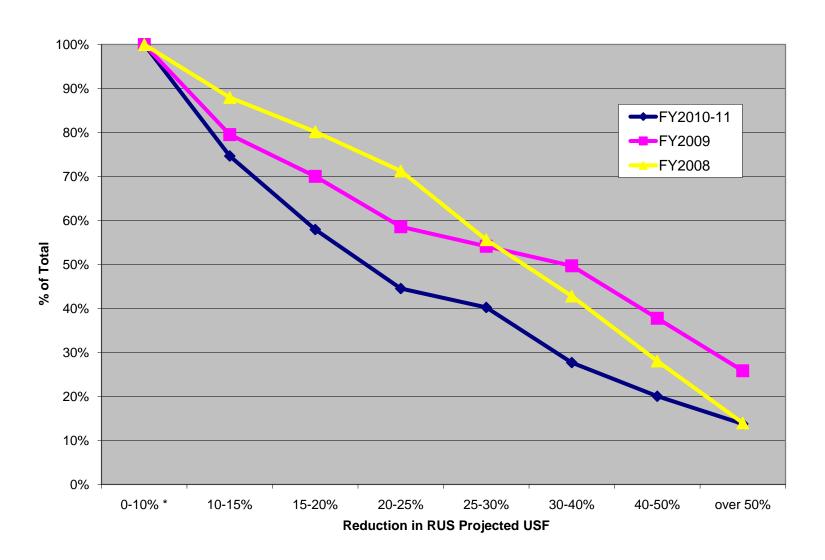
Loan Lines still Feasible with TIER 1.25 and 20% Reduction in Projected USF

FY2010-11 FY2009 FY2008 49.50% 77.13% 56.24%

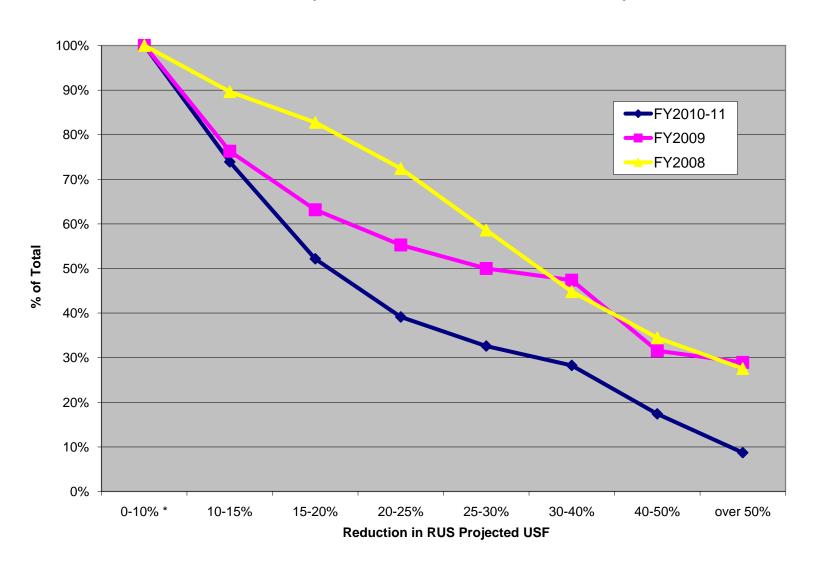
Loan Dollar Amounts (\$000s) Remaining Feasible with TIER of 1.25 (with reduced RUS Forecasted USF)



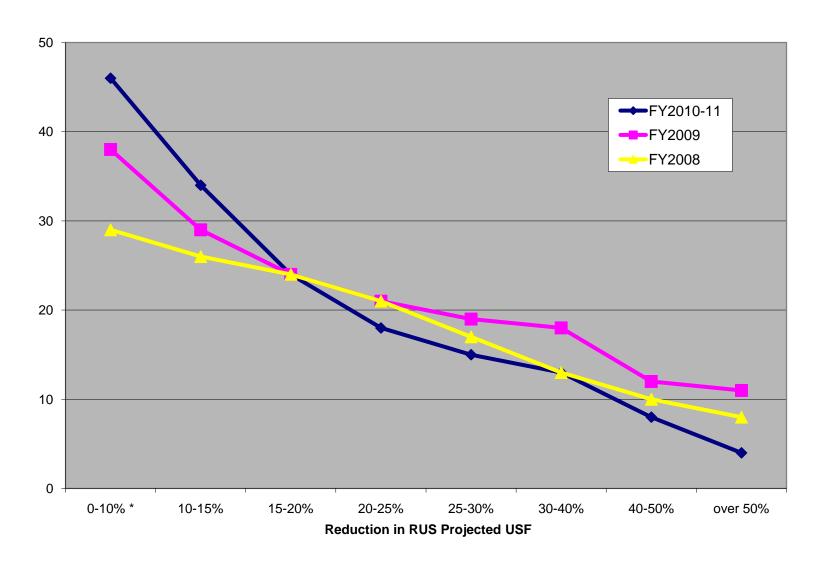
% of Loan Dollar Amounts Remaining Feasible with 1.25 TIER (with reduced RUS Forecasted USF)



% of Loan Applications Remaining Feasible with 1.25 TIER (with reduced RUS Forecasted USF)



of Loan Applications Remaining Feasible with 1.25 TIER (with reduced RUS Forecasted USF)



Loans Approved - RUS FY 2008 to June 2011 Maximum Amount of USF reduction and still Maintain Loan Feasibility with a TIER of 1.0

# of Loans	% of Total Loans
# of Loans	% of lotal Loans

USF Reduction	FY2010-2011(part			FY2010-2011(part		
w/1.0 TIER	year)	FY2009	FY2008	year)	FY2009	FY2008
0-10%	46	38	29	100.00%	100.00%	100.00%
10-15%	44	36	28	95.65%	94.74%	96.55%
15-20%	40	33	27	86.96%	86.84%	93.10%
20-25%	28	25	25	60.87%	65.79%	86.21%
25-30%	23	21	22	50.00%	55.26%	75.86%
30-40%	17	19	19	36.96%	50.00%	65.52%
40-50%	11	16	13	23.91%	42.11%	44.83%
over 50%	6	13	9	13.04%	34.21%	31.03%
Totals	46	38	29	100.00%	100.00%	100.00%

Loans still Feasible with TIER 1.0 and 20% USF Reduction

FY2010-11 FY2009 FY2008 60.87% 65.79% 86.21%

Note: Significant trend in fewer Borrowers being able remain feasible with less USF than the RUS projected amount

Loans Approved - RUS FY 2008 to June 2011 Maximum Amount of USF reduction and still Maintain Loan Feasibility with a TIER of 1.0

Loan Dollars (thousands)

% of Total Loan Dollars (thousands)

USF Reduction	FY2010-2011(part			FY2010-2011	(part	
w/1.0 TIER	year) FY	2009 FY	2008	year)	FY2009	FY2008
0-10%	\$867,284	\$690,000 na	1	100	.00% 100.00	% na
10-15%	\$852,597	\$674,687	\$674,966	98	.31% 97.78	% 100.00%
15-20%	\$702,612	\$619,221	\$609,216	81	.01% 89.74	% 90.26%
20-25%	\$538,032	\$487,970	\$580,939	62	.04% 70.72	% 86.07%
25-30%	\$454,285	\$404,180	\$509,462	52	.38% 58.58	% 75.48%
30-40%	\$358,378	\$342,962	\$432,982	41	.32% 49.70	% 64.15%
40-50%	\$228,970	\$262,049	\$289,125	26	.40% 37.98	% 42.84%
over 50%	\$147,607	\$181,747	\$167,521	17	.02% 26.34	% 24.82%
Totals	\$867,284	\$690,000	\$674,966	100	.00% 100.00	% 100.00%

Loan Dollars still Feasible with TIER 1.0 and 20% USF Reduction

FY2010-11 FY2009 FY2008 62.04% 70.72% 86.07%

Note: Significant trend in fewer Borrowers being able remain feasible with less USF than the RUS projected amount

Loans Approved - RUS FY 2008 to June 2011 Maximum Amount of USF reduction and still Maintain Loan Feasibility with a TIER of 1.0

Access Lines

% of Total Access Lines (thousands)

USF Reduction	FY2010-2011(part			FY2010-2011(part		
w/1.0 TIER	year)	FY2009	FY2008	year)	FY2009	FY2008
0-10%	172,238	172,044	na	100.00%	100.00%	na
10-15%	169,464	169,718	177,213	98.39%	98.65%	100.00%
15-20%	140,959	162,246	147,821	81.84%	94.30%	83.41%
20-25%	116,232	139,601	138,277	67.48%	81.14%	78.03%
25-30%	94,608	132,705	102,446	54.93%	77.13%	57.81%
30-40%	69,095	127,474	94,365	40.12%	74.09%	53.25%
40-50%	41,780	65,209	67,066	24.26%	37.90%	37.84%
over 50%	30,025	53,627	29,840	17.43%	31.17%	16.84%
Totals	172,238	172,044	177,213	100.00%	100.00%	100.00%

Loan Access Lines still Feasible with TIER 1.0 and 20% USF Reduction

67.48%	81.14%	78.03%
FY2010-11	FY2009	FY2008

Capped USF Effect on TIER

- RUS studied the 46 borrowers that received loans in FY 10–11 (YTD)
- Assuming those borrowers represent the 'universe' of all RLECs, RUS 'capped' the USF fund at the aggregate 2009 level received for those borrowers (\$107.4M)
- At that level, the pool of the 46 loans would not be financially feasible
- An increase of \$53.85M... (50.1% of the 'capped' level) would be needed to make an aggregate TIER of 1.0
- •RUS loan studies projected an increase in USF of \$128M to financially support \$867M of loan funded investment.